

# PULSE INTERVAL TO VOLTAGE CONVERTER AND CONVERSION METHOD THEREOF

## Abstract

A Pulse Interval to Voltage Converter (PIVC) and conversion method thereof is revealed. The PIVC comprises a clock generator, a counter, a latch, a digital-to-analog converter (DAC), a delay unit, a frequency regulator and an underflow protection unit. New components, such as the delay unit, the frequency regulator and the underflow protection unit, are incorporated into the present invention, unlike the conventional art. The delay unit is intended for the programming of the default duration of delay, so as to delay the time for the counter to reset to zero, and in consequence regulate the baseline of the output voltage. The frequency regulator can regulate the clock generation frequency of the clock generator, so as to regulate the resolution of the output voltage. The underflow protection unit turns back external signals while the delay unit is operating, so as to minimize interference from noise.